

What is claimed is:

1. A self-light-emitting module comprising a light-emitting display panel in which a number of pixels using a self-light-emitting element with an electric polarity are arranged in a matrix manner, and a lighting drive device for selective lighting drive of the self-light-emitting elements on the light-emitting display panel, wherein

a malfunction detection unit, by which malfunction in light emitting caused by defects in the light-emitting display panel, the lighting drive device, or a connecting portion between the light-emitting display panel and the lighting drive device is detected, is further provided.

2. The self-light-emitting module according to claim 1, wherein

the malfunction detection unit has a configuration by which an operation, by which malfunction in light emitting caused by defects in the light-emitting display panel, the lighting drive device, or the connecting portion between the light-emitting display panel and the lighting drive device is detected, can be executed at arbitrary timing under a state in which the self-light-emitting display module is installed in a device using the module.

3. The self-light-emitting module according to claim 1, wherein

the malfunction detection unit has a configuration by which

malfunction in light emitting of all pixels using the self light-emitting elements arranged on the light-emitting display panel can be detected.

4. The self-light-emitting module according to claim 2, wherein

the malfunction detection unit has a configuration by which malfunction in light emitting of all pixels using the self light-emitting elements arranged on the light-emitting display panel can be detected.

5. The self-light-emitting module according to any one of claims 1 to 4, wherein

the malfunction detection unit has a configuration by which the coordinate of a pixel using the self light-emitting element arranged on the light-emitting display panel can be detected.

6. The self-light-emitting module according to any one of claims 1 to 4, wherein

the malfunction detection unit has a configuration by which a value of a current passing in the non-light-emitting direction of the self-light-emitting element can be measured.

7. The self-light-emitting module according to claim 5, wherein

the malfunction detection unit has a configuration by which a value of a current passing in the non-light-emitting direction

of the self-light-emitting element can be measured.

8. The self-light-emitting module according to claim 6, comprising

a function by which a defect pattern in the light-emitting display panel, the lighting drive device, or the connecting portion between the light-emitting display panel and the lighting drive device is identified by the value of a current passing in the non-light-emitting direction of the self-light-emitting element.

9. The self-light-emitting module according to claim 7, comprising

a function by which a defect pattern in the light-emitting display panel, the lighting drive device, or the connecting portion between the light-emitting display panel and the lighting drive device is identified by the value of a current passing in the non-light-emitting direction of the self-light-emitting element.

10. The self-light-emitting module according to claim 6, wherein

the malfunction detection unit has a configuration by which the value of a current passing in the non-light-emitting direction of the self-light-emitting element is converted into a digital value.

11. The self-light-emitting module according to claim 7, wherein

the malfunction detection unit has a configuration by which the value of a current passing in the non-light-emitting direction of the self-light-emitting element is converted into a digital value.

12. The self-light-emitting module according to claim 8, wherein

the malfunction detection unit has a configuration by which the value of a current passing in the non-light-emitting direction of the self-light-emitting element is converted into a digital value.

13. The self-light-emitting module according to claim 9, wherein

the malfunction detection unit has a configuration by which the value of a current passing in the non-light-emitting direction of the self-light-emitting element is converted into a digital value.

14. The self-light-emitting module according to any one of claims 1 to 4, having

a configuration by which a storage notification unit is driven, based on detection of malfunction in light emitting by the malfunction detection unit.

15. The self-light-emitting module according to claim 5, having

a configuration by which a storage notification unit is driven, based on detection of malfunction in light emitting by the malfunction detection unit.

16. The self-light-emitting module according to claim 6, having

a configuration by which a storage notification unit is driven, based on detection of malfunction in light emitting by the malfunction detection unit.

17. The self-light-emitting module according to any one of claims 1 to 4, wherein

light-emitting elements arranged on the light-emitting display panel are organic EL elements using an organic compound for a light-emitting layer.

18. A method for verifying a defect state of a self-light-emitting display module comprising a light-emitting display panel in which a number of pixels using a self-light-emitting element with an electric polarity are arranged in a matrix manner, a lighting drive device for selective lighting drive of the self-light-emitting elements on the light-emitting display panel, a malfunction detection unit, by which malfunction in light emitting caused by defects in the light-emitting display panel, the lighting drive device, or a

connecting portion between the light-emitting display panel and the lighting drive device is detected, wherein

the malfunction detection unit sequentially executes a charge discharge step at which charges accumulated in the self-light-emitting elements arranged on the light-emitting display panel are discharged;

a current supply step at which a current is supplied in a non-light-emitting direction of the element concerned to the self-light-emitting under a state in which charges are discharged;

a current-value measure step at which a value of a current passing in a pixel including the self-light-emitting element after a predetermined time has passed from the starting point for supplying the current; and

a determination step at which the presence of a defect in the light-emitting display panel, the lighting drive device, or the connecting portion between the light-emitting display panel and the lighting drive device is determined by a value of a current measured at the current-value measure step, and

a storage notification unit is activated according to the defect state determined at the determination step.

19. The method for verifying a defect state of a self-light-emitting display module according to claim 18, wherein

the storage notification unit is activated according to a position of a defective pixel on the light-emitting display

panel when the presence of a defect in a pixel arranged on the light-emitting display panel is identified at the determination step.

20. The method for verifying a defect state of a self-light-emitting display module according to claim 18 or 19, wherein

the charge discharge step, the current supply step, the current-value measure step, and the determination step are executed for each row or for each column of the self-light-emitting elements arranged in a matrix manner.